In 1960 at the Western Australian Museum, Glauert received a specimen of *Denisonia pallidiceps* collected at the same research station by Dr. K. Immelmann.

Since then the Western Australian Museum has accessed specimens of *D. pallidiceps* from Mitchell Plateau (14° 53' S, 125° 49' E) and King Edward River, and specimens of *D. suta* from Kimberley Research Station (Kununurra), Lake Argyle and west of Rosewood Station.

Denisonia suta can be distinguished from other Kimberley elapids by its 19 rows of dorsal scales at midbody.

Denisonia pallidiceps is distinguished from *Denisonia punctata* (the other small elapid in the Kimberleys with 15 rows of dorsals at midbody and undivided subcaudals) by its dark unspotted head and sharp demarcation between dorsal and ventral colouration.

Other details are as follows:

Denisonia pallidiceps (3 specimens)—Ventrals: 163-176 (mean 172.6). Subcaudals: 35-46 (mean 40). Ventrals plus subcaudals 209-215 (mean 212). Snout-vent length (mm): 382-480 (mean 426). Tail as percent of SVL: 13.7-26.5 (mean 18.9).

Dorsum entirely slaty grey or reddish brown. Undersurface immaculate white except for a row of dark longitudinal spots on posterior ventrals and all subcaudals. Scales on lower flanks variably marked white (some scales entirely white) making the demarcation between the dark back and pale belly irregular. Upper labials pale, grading into the darker colour of the rest of the head.

Denisonia suta (13 specimens)—Ventrals: 161-181 (n 12, mean 175.9). Subcaudals: 30-38 (n 12, mean 31.4). Ventrals plus subcaudals: 196-218 (n 12, mean 210.2). Snout-vent length (mm): 194-550 (n 10, mean 374). Tail as percent SVL: 11.6-15.4 (n 10 mean 13.9).

Back a uniform glossy greyish brown. Head with a darker crown (not easily seen in dark adults). Upper labials and rostral blotched white thus forming an irregular white line from gape to gape. Sometimes a broken white line from nostril through eye to temporals. Chin and margins of lower labials usually smudged grey. Ventrals dark edged. Subcaudals on adults with a dark median smudge. Young specimens reddish with a dark base to each scale.

—L. A. SMITH, Western Australian Museum, Perth.

The Port Lincoln Parrot *(Barnardius zonarius zonarius)* **feeding on Lerps at Kalgoorlie.**—Whilst collecting Port Lincoln Parrots *(Barnardius zonarius zonarius)* in June 1977 at a site 50 km north of Kalgoorlie I observed several of these birds peeling strips of bark from branches of *Eucalyptus campaspe* and feeding on some object concealed beneath these strips. On closer examination up to three to four scale insects were found on sections of branches from which the bark had been removed. These insects were identified (with the assistance of David Morgan, University of Adelaide, Department of Entomology) as either *Glycaspis* sp. or *Cometopsylla* sp.

Both these genera produce characteristic white, sticky secretions called lerps which consist predominantly of carbohydrate material (CSIRO, *Insects of Australia*, 1970, p. 133). Surrounding the lerp was a viscous honey-like liquid which presumably exuded from the plant phloem via openings created by the scale insects.

The parrots fed in the following manner: a strip of bark was removed initially with the beak and held with one foot (if necessary) while the bird licked the area covered by both lerp and plant sap. Since part of my work also involved obtaining crop samples from shot specimens for analysis of feeding habits, I examined these for the presence of scale insects and, in one bird's crop, observed three.

Although Froggatt *(Forest Insects of Australia*, 1923) stated that several species of brush-tongued parrakeets fed upon leaf scale insects in Victoria, no report of Port Lincoln parrots feeding on either scale insects, their lerps, or *Eucalyptus* phloem material has been published. It is common knowledge, however, that the closely related Twenty-eight

parrot consumes nectar obtained from Marri and other Eucalypt blossoms (Robinson, *W.A. Nat.*, 7, 1960: 109-115 and pers. obs.).

This intake of high energy food may be important to the birds for two reasons. Firstly, most at this time of year were associating in pairs and actively selecting suitable nest sites. Energy requirements during the reproductive period for birds in general are greater than at other times of the year (Weiner and Glowacinski, *Condor*, 77, 1975: 233-242) and hence a high carbohydrate food source would assist in meeting these requirements. Secondly, carbohydrate when metabolized produces more heat than either protein or fat. It may thus constitute an important food item in species inhabiting areas which experience low winter temperatures, since several desert species have been found to possess lower metabolic rates and hence lower rates of heat production than more mesic species (Kendeigh and Blem, *Comp. Biochem. Physiol.*, 48A, 1974: 175-187).

—O. G. NICHOLS, Zoology Department,
University of Western Australia.

Food of the Western Bower-bird in the Chichester Range, W.A.— In the course of other work in the Chichester Range I was able to observe a group of Western Bower-birds *(Chlamydera maculata)* over a nine-month period.

The study area is Narrina Gorge in the Pyramid region of the dissected area of the Chichester Range. The gorge is fairly straight, cut into Kyena basalt and is vegetated with open shrubland along the course of the stream. The sides of the gorge are fairly steep, rising to a plateau of spinifex grassland on the tops. The gorge is about five miles long and one group of bower-birds inhabit the whole of it. In 1975 there were four birds in the group. The bower was centrally situated in the gorge, in a spot protected by shrubs from cattle and kangaroos, and also from flooding by its height above the river bed. It was also protected from fire by being in the creek shrubs rather than the spinifex plains.

Observations were made of birds feeding on succulents. Eleven faeces samples were collected and checks were made between the seeds found in the faeces sample and those on the fruiting trees in the gorge. Identification of the plants was verified by the staff of the Western Australian Herbarium in Perth.

Observations began in April and during that month and May the birds were feeding on the fruits of *Securinega melanthesoides.* In June and July they were observed feeding on the fruits of *Amyema benthamii* and the flower buds of *Acacia trachycarpa.* In July they could be seen feeding on three other shrubs: *Trichosanthes cucumerina* (which was also used as a bower object), *Jasminum lineare* (doubtful food) and *Clerodendrum lanceolatum.* The jasmin was not found in the faeces samples but birds were observed peeking at the fruits on the bushes. From August until November the birds spend most of their time feeding on *Ficus platypoda.* This is the food to which much emphasis is given by Serventy & Whittell *(The Birds of Western Australia,* 1967) but my observations indicate that the species is only one of several fruiting plants which are used by bower-birds, although it does seem to be the main food during the wet season. It is interesting to note that some individual *Ficus* plants, one for example growing by Python Pool, will fruit out of season, as early as July, and may provide *Ficus* fruits for the birds at times outside the normal fruiting period of the plant.

With the advent of the wet season *Securinega melanthesoides* fruited and in January 1976 the birds completed the feeding cycle by feeding on this as well as *Ficus platypoda.* No birds were observed feeding on insects.

The above plants are the basic succulents which form the main framework of their diet, around which, with more detailed observations, further variations in feeding could be added.

—GORDON BINSTED.